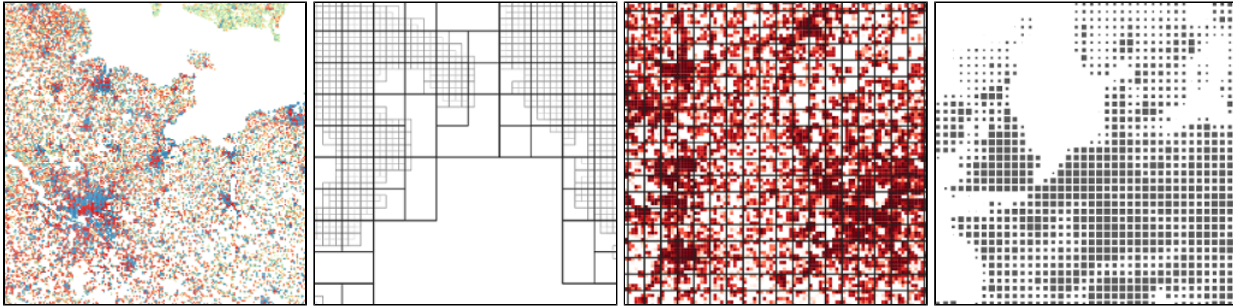


Grids

General description

These datasets contain grid cells covering the European land territory, for various resolutions from 1km to 100km. Base statistics such as population figures are provided for these cells. For more specific requirements regarding the grid resolution (such as for sub-kilometric grids) and its geographical extent, please use the [Eurostat GridMaker tool](#).



Version history

1.3 (31/03/2023): Addition of 2021 population. Addition of CSV and parquet formats.

1.2 (16/03/2021): Addition of 2018 population estimates (JRC - DG REGIO).

1.1 (22/10/2020): Addition of NUTS 2021 codes.

1.0 (24/01/2020): Creation.

Attributes

Attribute	Datatype	Description
GRD_ID	String	The grid cell identifier according to INSPIRE specification .
X_LLC	int	X coordinate of the lower left corner.
Y_LLC	int	Y coordinate of the lower left corner.
TOT_P_YYYY	int	Total population for year YYYY. The years 2006, 2011, 2018 and 2021 are provided. For more information on this data, see GEOSTAT project - JRC/DG REGIO and EFGS . Note that 2006 and 2018 figures are model based. The specific license conditions, by year and country, are described below.
LAND_PC	double	Estimate of the land share (in percentage) of the grid cell.
DIST_COAST	double	Estimate of the minimum distance to the coast, in meters.
DIST_BORD	double	Estimate of the minimum distance to a country land border, in meters.
CNTR_ID	String	List of country codes the grid cell intersects or is nearby to (within approximately 1.5 km).
NUTSYYYY_X	String	List of NUTS codes (for level X, from 0 to 3) the grid cell intersects or is nearby to (within approximately 1.5 km). YYYY is the NUTS version, 2016 or 2021.

Resolution

The following resolutions are provided: 1km, 2km, 5km, 10km, 20km, 50km, 100km.

Geometrical representation

The grid cells are represented as polygon or point (center point) geometries.

For non-geometric formats (CSV and Parquet), the geometry can be retrieved from the coordinates of the cell lower left corner (X_LLC and Y_LLC attributes) and the grid resolution.

Geographical extent

European union countries and some other neighbor countries: DE, PT, DK, LT, LU, HR, LV, UA, HU, MC, UK, MD, ME, IE, MK, EE, AD, IM, MT, EL, IS, IT, VA, AL, ES, AT, JE, RO, NL, BA, NO, RS, BE, FI, BG, FO, FR, SE, SI, BY, SK, SM, GG, GI, CH, CY, CZ, PL, LI, TR.

Data sources and production process

- Country and NUTS geometries used to compute attributes CNTR_ID, LAND_PC, NUTS_X_ID and DIST_BORD are extracted from different versions of the [EuroBoundaryMap](#) dataset and the administrative unit layer of the Eurostat-GISCO database.
- Land geometry used to compute the LAND_PC attribute is extracted from the [EuroBoundaryMap](#) dataset. Inland waters are extracted from [CORINE Land Cover 2018](#) dataset.
- The grid cell geometries are produced with the [Eurostat GridMaker](#).

Coordinate Reference System

ETRS89 Lambert Azimuthal Equal-Area ([EPSG: 3035](#)).

Download service

Eurostat website download page: <https://ec.europa.eu/eurostat/web/gisco/geodata/reference-data/grids/>

Download folder: <https://gisco-services.ec.europa.eu/grid/>

API: https://gisco-services.ec.europa.eu/grid/grid_<res>km<format> where **res** is the resolution among (1,2,5,10,20,50,100) and **format** is the encodings format (and geometry type) among (_surf.gpkg, _point.gpkg, .csv, .parquet).

Encodings

The data is encoded in [GeoPackage](#), CSV and [Parquet](#) formats. For a conversion in other formats, [GDAL](#) conversion software could be used.

Licence

There are [specific download provisions](#) for the population figures (attributes starting with TOT_P_) which must be respected. The license conditions for these population figures vary by year and country. For more information on these specific provisions, consult the content of [this page](#) and [this page](#).

For the other elements of the dataset, there are no specific download and usage provisions. However, please refer to [the general copyright notice and licence provisions](#) which must be respected. The download and usage of these data is subject to their acceptance.

FAQ

How to extract grid cells for a specific country or NUTS region?

Answer: Since the CNTR_ID attribute contains a list of codes, a SQL query with a strict equality such as "CNTR_ID" = 'BG' will exclude cells intersecting 'BG' and other neighbor countries. The following SQL query should be used instead: "CNTR_ID" LIKE '%BG%'. It allows including all cells where the code 'BG' appears. The same principle applies for NUTS regions.